Amendments to the Drawings:

Applicants are amending FIGS. 1-3, 8, 9, 12, and 14 of the drawings. These figures are being amended to add descriptive legends for various blocks shown in the figures.

Accordingly, Applicants are attaching seven (7) sheets of marked-up drawing sheets, showing the amendments made, along with seven (7) replacement drawing sheets (corresponding to original sheets 1-3, 8, 9, 12, and 13).

Remarks

Applicants thank the Examiner for his careful consideration of this application. Applicants now respectfully request reconsideration of this application in view of the amendments above and the following remarks.

Claims 1-20 and 29-36 are currently pending in this application, of which Claims 1, 8, 15, 18, 29, and 35 are independent claims. Claims 21-28 were previously withdrawn and are now cancelled without prejudice. Claims 29-35 have been added. Claims 1-6 and 8-13 have been amended.

Applicants gratefully acknowledge the indication of allowable subject matter in Claims 6 and 13. Applicants have combined a portion of each of these claims into its respective parent independent claim (Claim 1 or Claim 8) but have opted not to fully combine the limitations of these claims with their parent independent claims at this time.

Applicants also note that no rejection is stated for Claim 16, which is, therefore, presumably allowable (but is not being amended at this time).

At pages 2-3, the Office Action objects to Figures 1-3, 8, 9, 12, and 14 of the drawings as lacking complete legends. Applicants have now amended these figures, as discussed above, and respectfully request withdrawal of these objections.

At page 3, the Office Action objects to Claim 9 based on an apparent error in dependency. This has now been addressed by an amendment to Claim 9, to change its dependency to be from Claim 8, as suggested by the Examiner.

At pages 3-5, the Office Action rejects Claims 1-3, 7, 9, 10, and 14 under 35 U.S.C. § 102(e) as being anticipated by Hsu et al. (U.S. Patent Application Publication No. 2005/0143116). At page 6, the Office Action rejects Claims 4, 5, 11, and 12 under

35 U.S.C. § 103(a) as being unpatentable over Hsu et al. in view of Jonsson (U.S. Patent Application Publication No. 2005/0143112). At pages 6-8, the Office Action rejects Claims 15, 17, and 20 under 35 U.S.C. 103(a) as being unpatentable over Hsu et al. in view of Kim et al. (U.S. Patent No. 7,027,828). At pages 8-9, the Office Action rejects Claim 19 103(a) as being unpatentable over Hsu et al. and Kim et al. in view of Jonsson. These rejections are respectfully traversed for at least the following reasons.

Claims 1 and 8 have now been amended to specify that that address the determination of signal quality across multiple transport channel signals of a received signal, including "generating a received signal quality signal in dependence on the quality of each transport channel signal prior to channel decoding, said generating including generating an average bit error rate over the at least two transport channel signals." It is noted that new Claim 29 includes a corresponding recitation, as well. It is respectfully submitted that the cited references, either alone or in combination fail to teach or suggest this feature.

First, it is noted that Hsu et al., noting, for example, Figure 4, addresses the determination of a *block* error rate, rather than a *bit* error rate of a block, based on block status determination for a transmitted block (see, e.g., paragraphs [0042] and [0044]; see, also, Figure 7).

In particular, the method used by Hsu et al. is based on determinations with respect to signal-to-interference ratio (SIR) and is discussed at paragraphs [0038]-[0047]. Paragraph [0039] discusses the "inner loop" process of Hsu et al., which determines an SIR estimate based on a pilot field of a received downlink transmission; it is noted that this is *not* based on the transport channels, but rather, on an overall downlink slot field

(the pilot field). This becomes clear from a review of Figure 3 and the discussion at paragraph [0036], which discusses how the data fields carry the transport channel data (see Figure 2).

Finally, to elaborate further on the discussion of block error rate versus bit error rate, as discussed at paragraph [0044], a physical channel of Hsu et al. typically carries N (greater than one) transport channels, with respective associated block error rate (BLER) targets. Paragraph [0047] discusses how a single SIR target is maintained for all of the transport channels of the physical channel and is adjusted based on whether each received block is only good blocks are received or if blocks need to be erased. The SIR target is compared with the received SIR determined based on the pilot, and the comparison result is used to provide a transmit power command to the base station (see Figure 4).

Based on these, and further observations on the disclosure of Hsu et al., it is noted that: (1) there is no disclosure or suggestion of the use of bit error rate; and (2) there is no discussion of generating an average bit error rate over the (multiple) transport channels, as claimed.

It is also noted that, with respect to Claims 7 and 14, Hsu et al. fails to disclose the transmission of a determined signal quality measure. Rather, as noted at page 5 of the Office Action, a transmit power command (TPC), which may be *based on* a signal quality measure, is transmitted.

A review of Jonsson reveals that Jonsson fails to remedy these deficiencies of Hsu et al. Noting Figure 5, Jonsson, similar to Hsu et al., addresses the question of how to update an SIR reference (or target) value 406 that is used to generate a power control command (TPC) to send to a transmitter. As noted in paragraph [0027], Jonsson et al.,

for data blocks that pass an initial cyclic redundancy check (CRC), received processed data bits are processed as if they were to be transmitted, to reconstruct the raw received data bits, and the results are compared with the actual raw received data bits to obtain an uncoded bit error rate (ucBER). However, there is no discussion of using an averaged BER over multiple transport channels, as claimed, to obtain a signal quality measure.

It is noted that, in Jonsson, at paragraph [0026], there is discussion of the use of a BLER estimator 410 that may use a moving average of a CRC error flag 412 to obtain an estimated BLER value 409. However, this cannot correspond to the claimed averaged bit error rate. The claimed averaged bit error rate is averaged over multiple transport channels, and Jonsson contains no mention of multiple transport channels. Furthermore, this results in a ucBER reference value for comparison with the determined ucBER for a block, discussed above and used to determine an SIR reference value 406 (i.e., neither of these corresponds to a bit error rate averaged over multiple transport blocks of a received signal).

For at least these reasons, it is respectfully submitted that the cited references fail to disclose or suggest Claims 1-14 and 29-34 and that these claims are, therefore, allowable over the cited references.

Claims 15, 18, and 35 all include the recitation of "extracting a transport channel format combination indicator from a received signal and determining the bit error rate therefore; and generating a received signal quality signal in dependence on the bit error rate of the extracted transport channel format combination indicator." The Office Action asserts that this is taught by the combination of Hsu et al. with Kim et al. Applicants respectfully disagree.

First, it is noted that the cited portions of Kim et al. are specifically directed to power control specifically for the TFCI field (see, e.g., col. 8, lines 55-59) and that conventional power control methods are used for the rest of the data. This is in contrast with Hsu et al., which addresses power control for a general transmitted signal, including data.

Second, Kim et al. uses TFCIs, but Kim et al. does not disclose or suggest determining a bit error rate of a TFCI.

Finally, as noted above, Hsu et al. does not disclose or suggest determining a bit error rate based on pilot signals (which, according to the Office Action, a skilled artisan would be motivated to replace with a TFCI). Rather, Hsu et al. discloses using pilot signals to determine a received SIR to be used to adjust a transmit power command (TPC), as discussed above.

For at least these reasons, it is respectfully submitted that the cited references fail to disclose or suggest, either alone or in combination, all of the elements of Claims 15-20, 35, and 36.

New Claims 29-36 are directed to processor-readable media containing processor-executable instructions and correspond to various previously-presented claims. Support for this type of claim may be found, e.g., in Fig. 2 and at page 2, lines 26-31.

Applicants may not have presented all possible arguments or have refuted the characterizations of either the claims or the cited references as may be found in the Office Action. However, the lack of such arguments or refutations is not intended to act as a waiver of such arguments or as concurrence with such characterizations.

Conclusion

Applicants believe that the above amendments and remarks address all of the grounds for objection and rejection and place the application in condition for allowance. Applicants, therefore, respectfully request prompt and favorable consideration of this Response and reconsideration of this application.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, he is invited to telephone the undersigned at the number provided.

Respectfully submitted,

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CB-575164

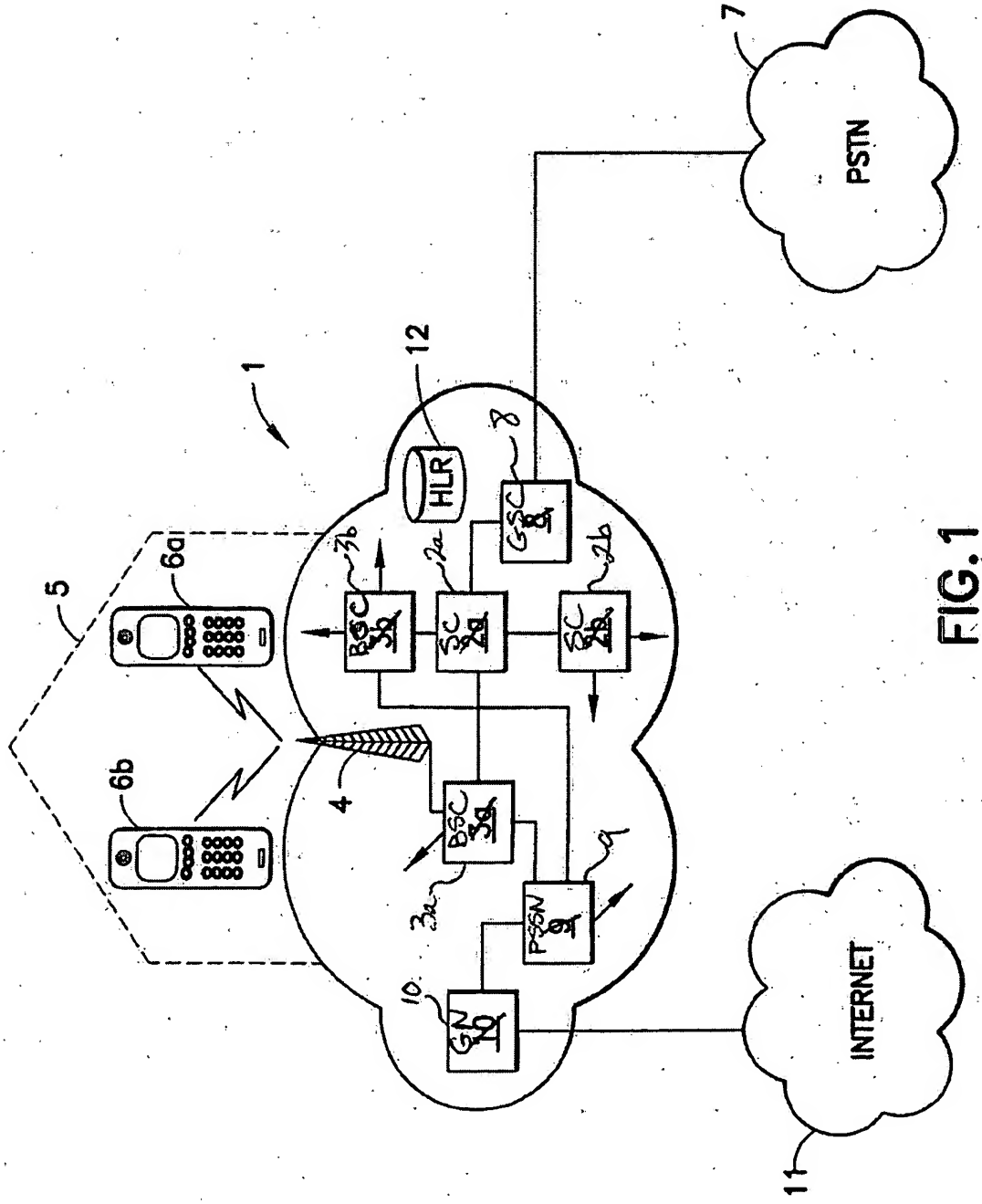
PSTN
7
1
12
HLR
8
GSC
8a
3b
2a
2b
BSC
3a
BSC
2a
BSC
2b
5
6a
6b
4
BSC
3a
PSSN
9a
10
GN
10a
INTERNET
11

FIG. 1

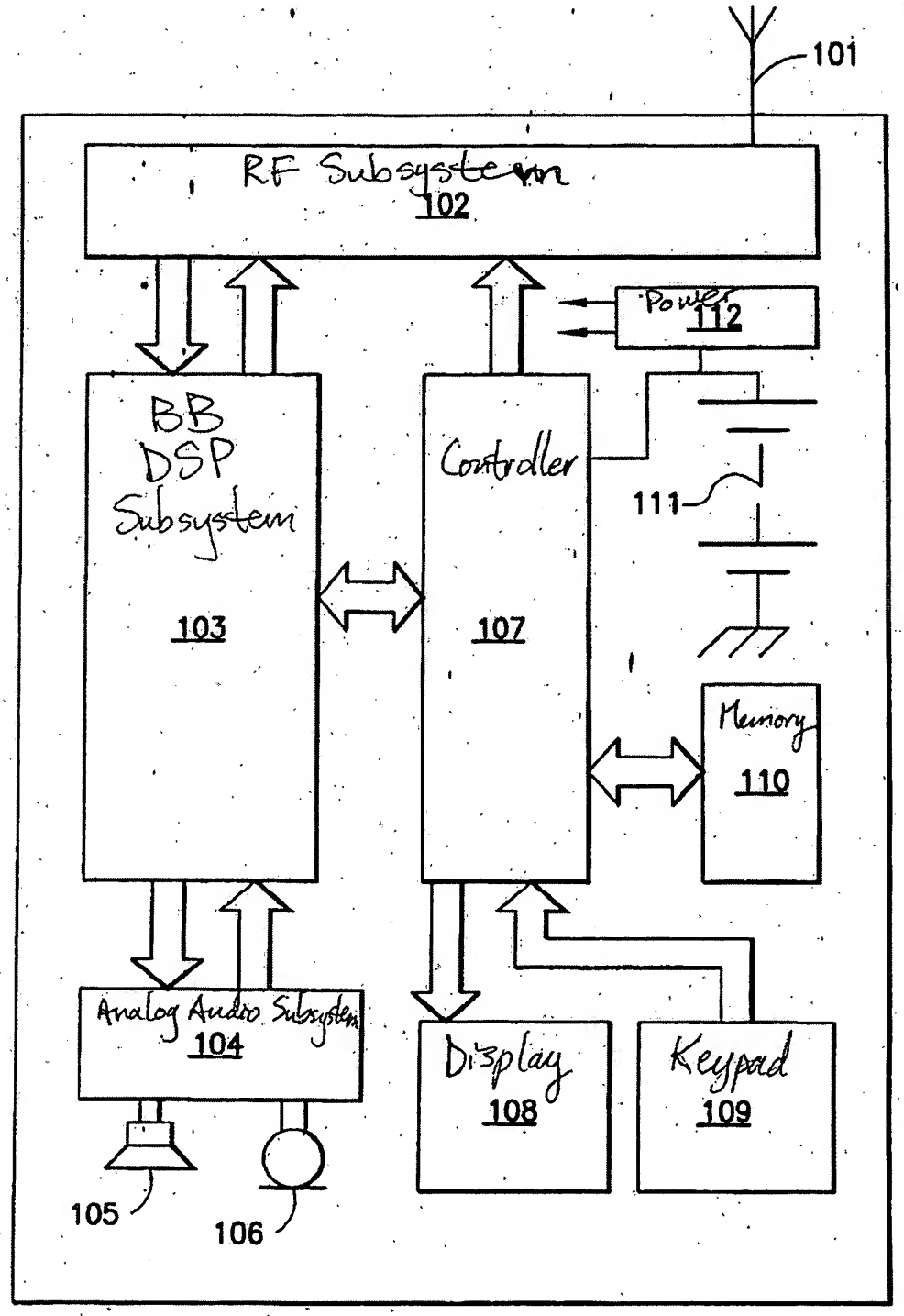
101
RF Subsystem
102
Power
112
BB
DSP
Subsystem
103
Controller
107
111
Memory
110
Analog Audio Subsystem
104
Display
108
Keypad
109
105
106

FIG.2

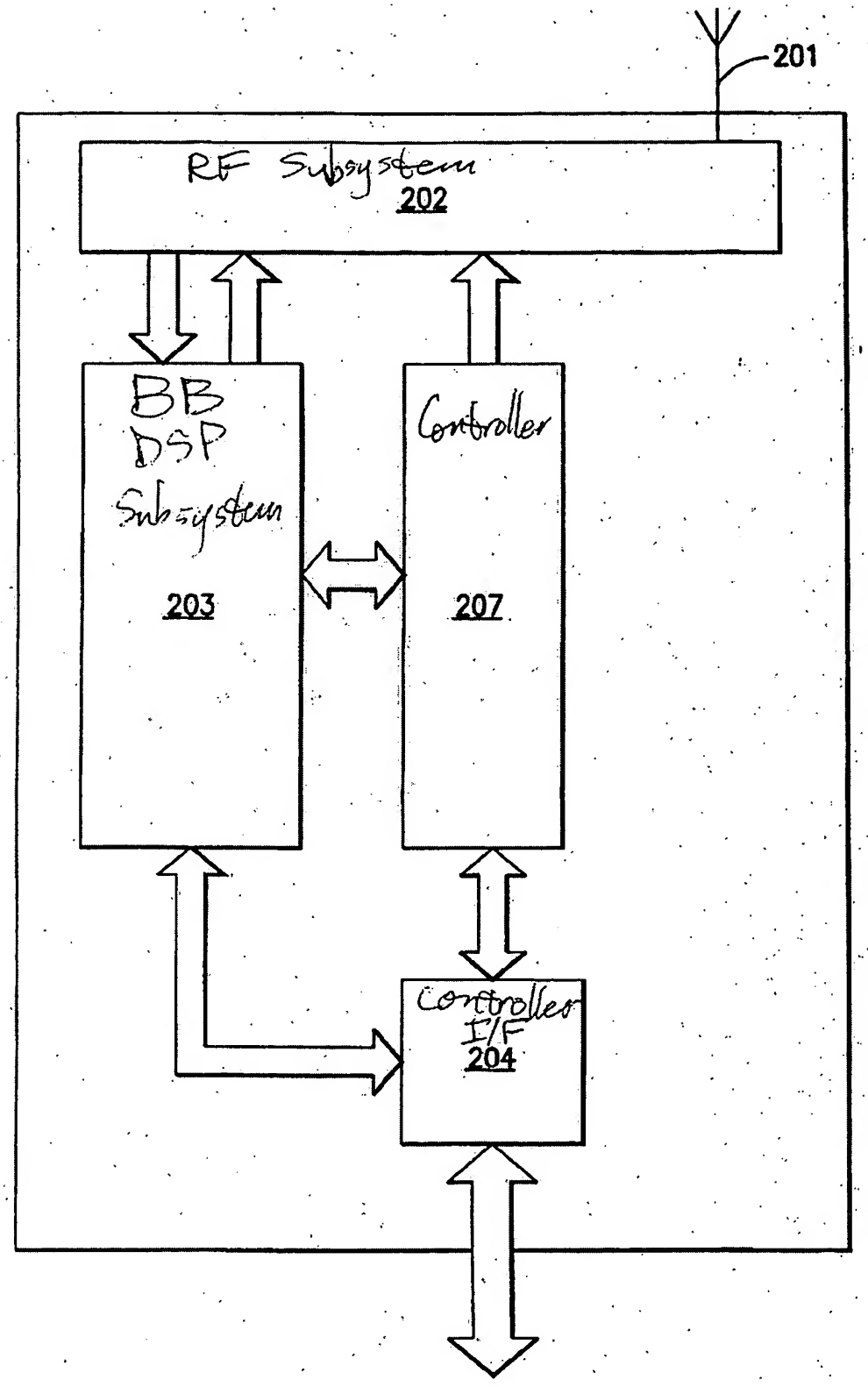
201
RF Subsystem
202
BB
DSP
Subsystem
203
Controller
207
Controller
I/F
204

FIG.3

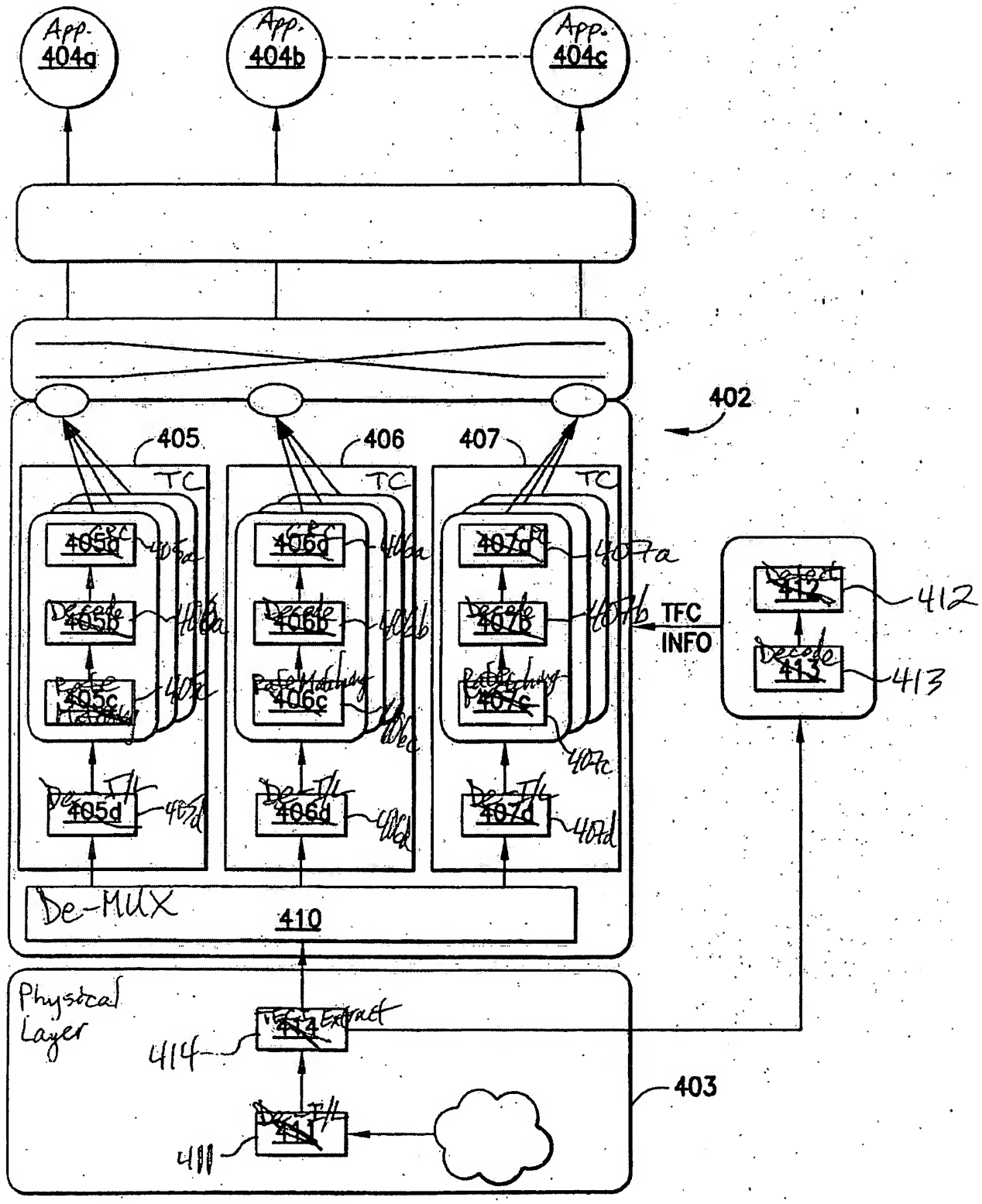
App. 404a
App. 404b
App. 404c
402
405
406
407
TC
405a
405b
405c
405d
406a
406b
406c
406d
407a
407b
407c
407d
TFC INFO
412
413
De-MUX
410
Physical Layer
414
411
403

FIG.8

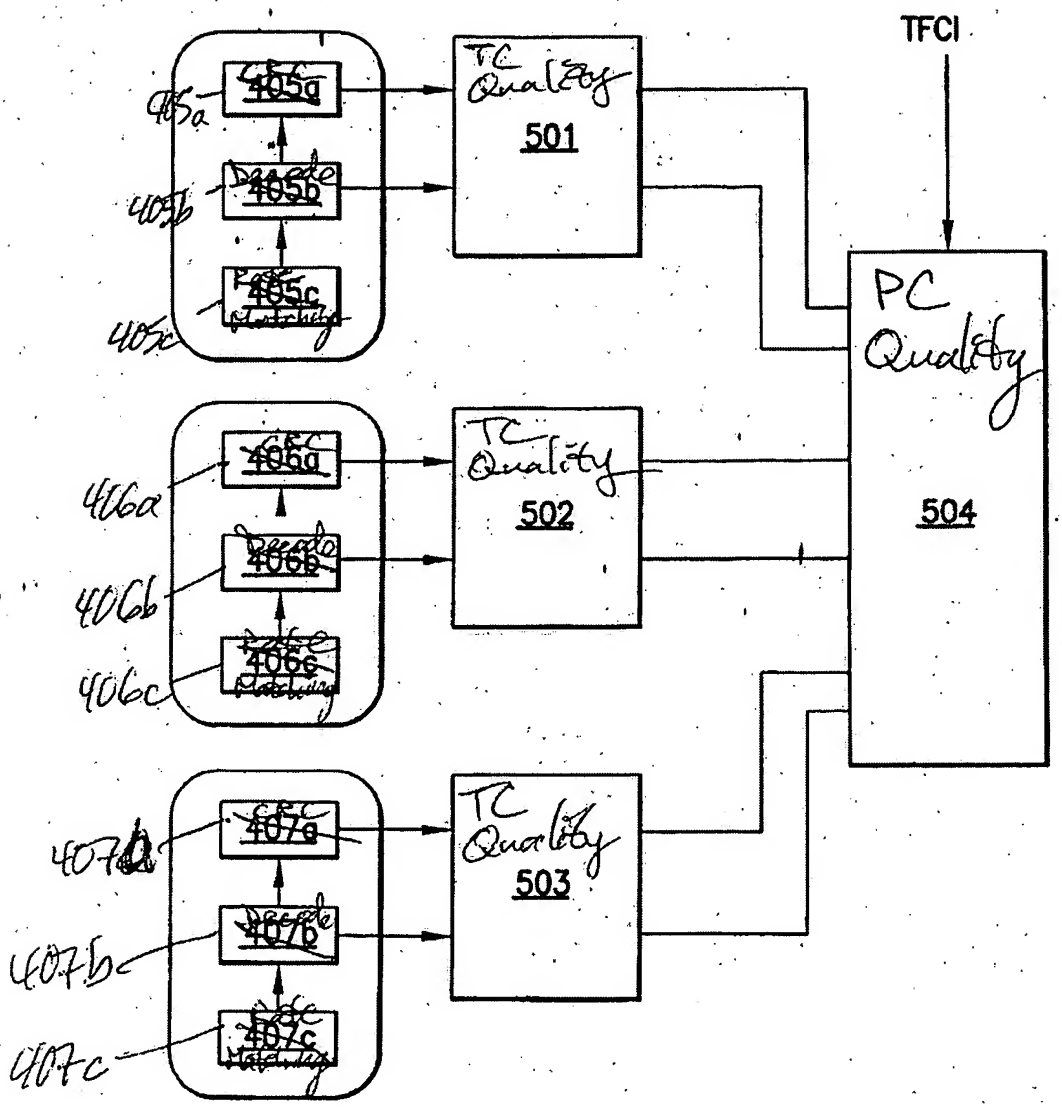
TFCI
405a
405b
405c
406a
406b
406c
407a
407b
407c
501
502
503
504
PC Quality

FIG.9

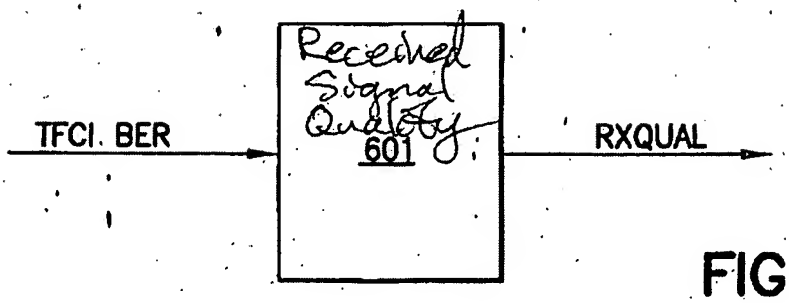
TFCI. BER
Received Signal Quality
601
RXQUAL

FIG.12

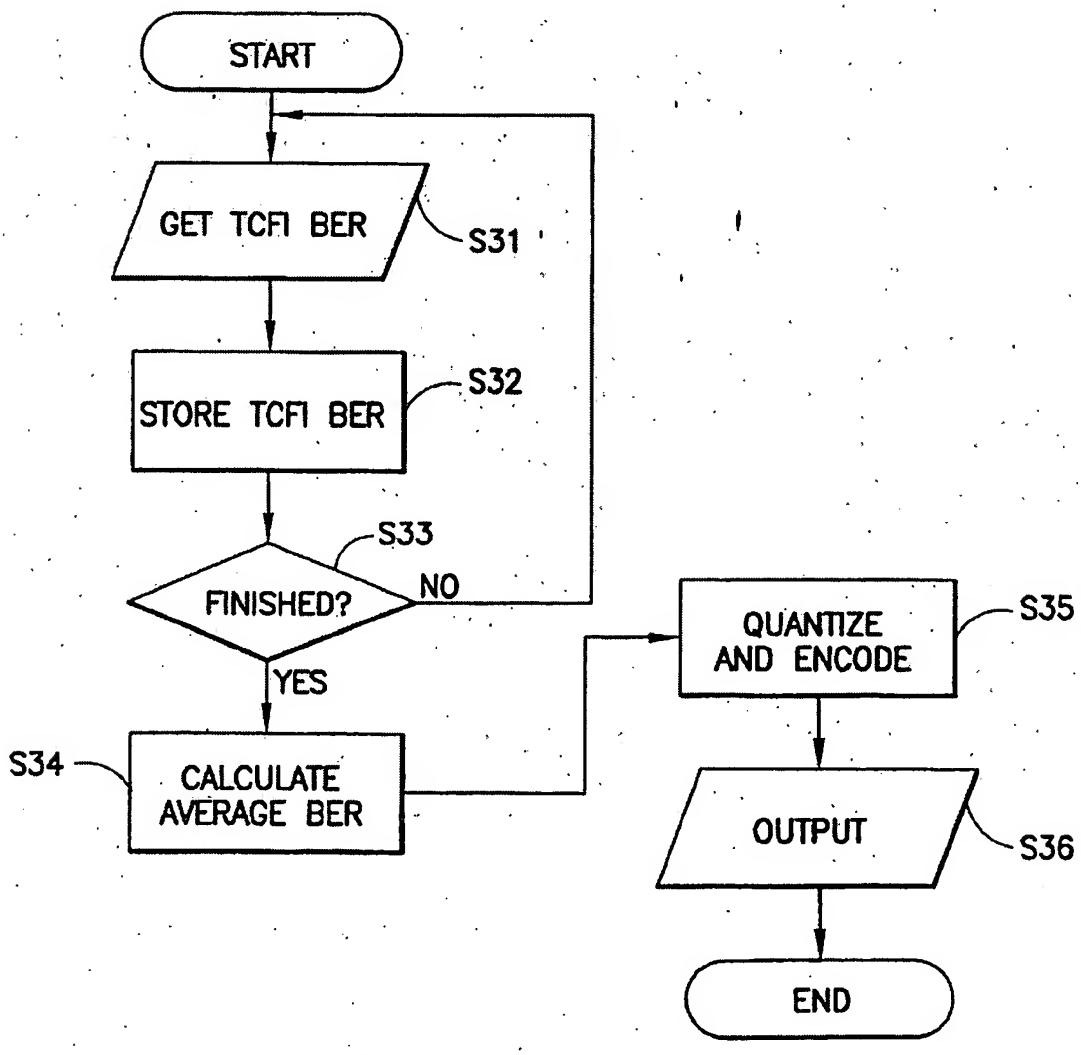
START
GET TCFI BER
S31
STORE TCFI BER
S32
S33
FINISHED?
NO
YES
S34
CALCULATE AVERAGE BER
QUANTIZE AND ENCODE
S35
OUTPUT
S36
END

FIG.13

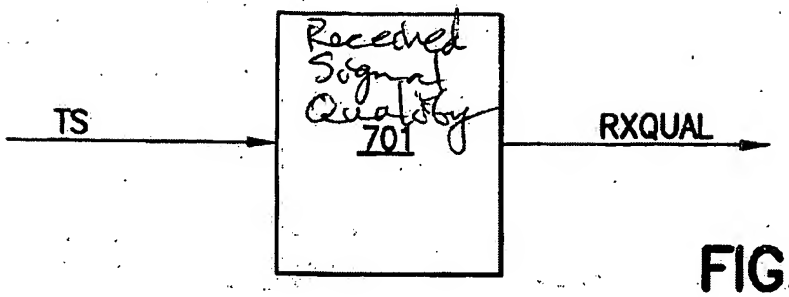
TS
Received Signal Quality
701
RXQUAL

FIG.14

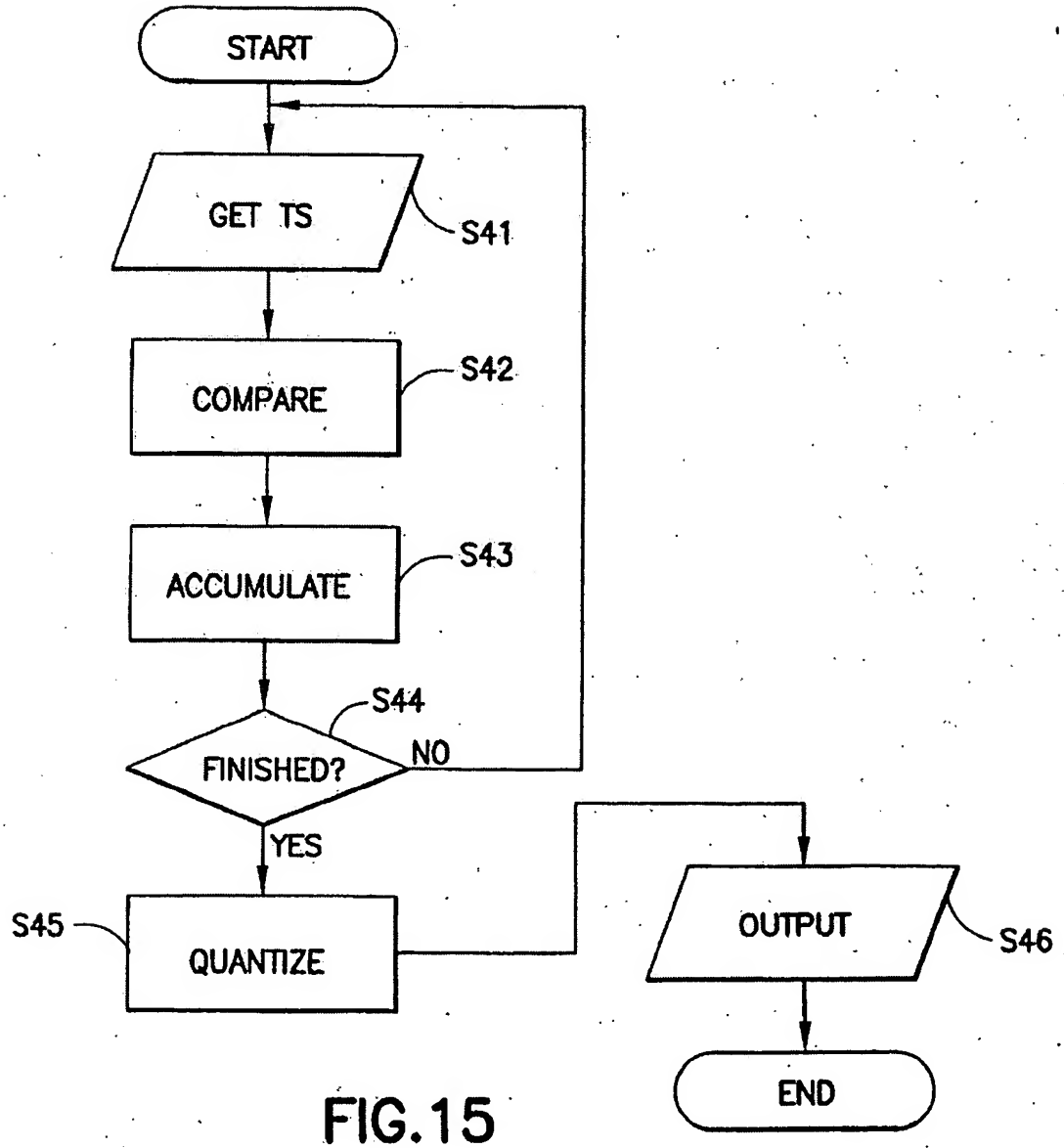
START
GET TS
S41
COMPARE
S42
ACCUMULATE
S43
S44
FINISHED?
NO
YES
S45
QUANTIZE
OUTPUT
S46
END

FIG.15